

A NEW SPECIES OF *POTENTILLA* L. (ROSACEAE)
FROM THE HIMALAYAS

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ABSTRACT

Potentilla panigrahiana Dikshit sp. nov. is described from the Himalayas.

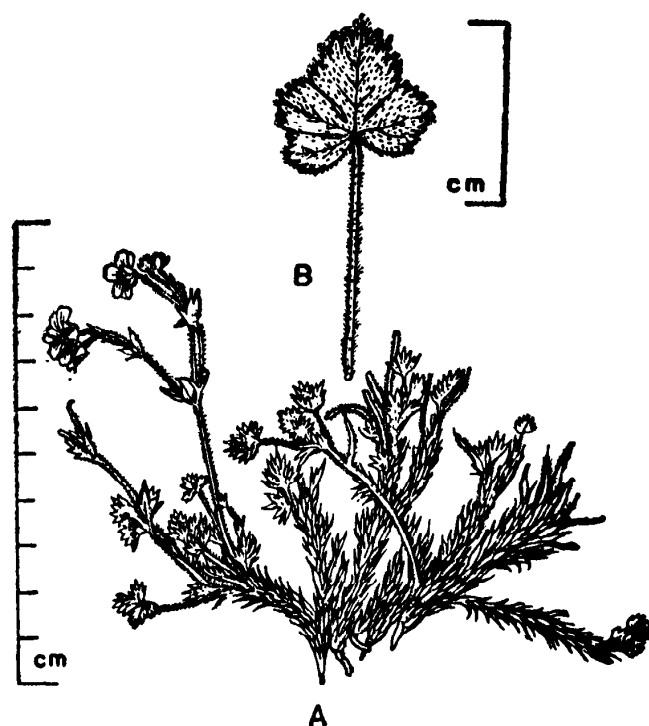
A thorough study of 1,600 herbarium specimens pertaining to the genus *Potentilla* L. held in several herbaria in India, in connection with the revisionary studies on the genus in the Indian context (Dikshit, 1985), has brought out specimens which represent two new species ('microspecies') : *Potentilla sojakii* Dikshit et Panigrahi (1984) and *P. panigrahiana*, sp. nov. and also a monotypic new genus, *Brachycaulos* Dikshit & Panigrahi (as 'Dixit') (Type : *B. simplicifolius* Dikshit & Panigrahi) (Dixit and Panigrahi, 1981). The identity of the new taxon described below has been confirmed by J. Sojak of Czechoslovakia, a recognised authority on the genus, when he states in his report on the thesis (Dikshit l.c.) "...I assent to the full extent to the separations of new sections *Tridentatae*, *Leuconotae* and *Duchesneas* and to the description of the new species..."

Potentilla panigrahiana Dikshit, sp. nov.
(Figs. A & B.)

Potentilla panigrahiana microspecies nova *P. saundersianae* Royle similis, style uniformiter incrassato, quam ovario 3-plo longiore, sed differt foliis radicalibus ternatis et digitatim 4-5 foliolatis, foliolis cum dentibus 5-8, acute serratis, inflorescentiisque 1-6-floris.

Holotypus : India, Kashmir, Burjile, Deosai Plains side, 4575 m, 31 July 1940, R. R. Stewart 20137 (CAL).

Herbs perennial. *Rootstocks* ascendent-erect, short branched, imbricately clothed with the relicts of dead stipules. *Radical leaves* digitately 3-(4)-5-foliolate, 1.5-7.5 cm long; cauline leaves herbaceous, ovate, acute, entire, hairy inside, externally niveo-tomentose. *Leaflets* sessile, rarely the median leaflets subsessile, obovate, base cuneate, acutely 5-8-serrulated, serrations oblong, upper surfaces soft-appressed-hairy, lower surfaces niveo-tomentose, 2-20 × 2-13 mm. *Flowering stems* ascendent-erect, 5-12 cm long, overtopping the radical leaves,



Figs. A & B : A. Habit. B. A leaf (Drawn from the Holotypus)

terete, 1.0-1.5 mm diam., floccose hairy. *Inflorescences* cyme, 1-6-flowered; pedicels 2.5-6.0 cm long, 0.5-1.0 mm diam., floccose hairy. *Episepals* 5, oblong, acute, entire or often 2-toothed, slightly shorter than the sepals, externally appressed hairy. *Sepals* 5, ovate, acute, entire, externally appressed hairy. *Petals* 5, obovate, slightly retuse, longer than sepals, veins distinct and dichotomously branched forming areoles. *Stamens* 20. *Receptacles* saucer-shaped, short, white-hairy. *Pistils* many; ovary glabrous; styles subterminal, evenly-thickened, three times longer than ovary; stigma swollen, irregular in outline. *Achenes* glabrous, with smooth surfaces, 1.0 × 0.5 mm.

Distribution: India (Jammu and Kashmir, Sikkim); Nepal, Bhutan and Tibet.

Specimens examined (other than the holotype):

SIKKIM: Llonak, 4390 m, 28 July 1909, *Smith and Cave* 2010 (CAL); Momby, Samdong, Lachung, 5285 m, 16 Aug. 1892, *G. A. Gammie* 878 (CAL).

Note: *Potentilla panigrahiana*, sp. nov. belongs to the subg. *Hypargyrium* Juzepczuk (1941/1971), sect. *Niveae* Juzepczuk (l.c.) [as '(Rydberg) Juz.']. In the Himalayas, the species of the sect. *Niveae* exhibit a good plasticity and natural hybridisation seems to be so common that the resultant hybrid species are fully distinct from their parents (Sojak, 1970). Keeping this view in mind, I presume that *P. panigrahiana*, micro-

species nova (Panigrahi and Purohit, 1983), is of hybrid origin with an undetermined taxon. It resembles *P. saundersiana* in having styles uniformly thickened at base but differs from it in having styles three times longer than ovary.

In leaf character (ternate and digitately 4-5-foliolate) *P. panigrahiana* also resembles *P. nivea* L. However, the style-character at once distinguishes the two species, the former with evenly thickened styles three times longer than the ovary, and the latter with basally thickened and papillate styles as long as the ovary.

The species is dedicated in honour of Dr. G. Panigrahi, my supervisor and guide.

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